Name:_____ HW22_BigRocksReview

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Geometry, Period_____

Due Date: Thu, 25 Sep 2014

Geometry Homework

Form A

Show your work! Explain your answer graphically, analytically, or verbally.

1. The multi-purpose room at Muchin has *k* rows of school uniforms for the incoming freshmen with $(s + p)$ uniforms in each row. Which of the following is an expression for the number of total uniforms (T) in the multi-purpose room? Circle your answer.

A. $T = k \cdot s + p$

B. $T = k \cdot s + k \cdot p$

C. $T = s + p \cdot k$

D. $T = k(s + p) + k(s + p)$

E. None of the above

If you choose E, write the correct equation here:

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2. Rewrite the equation to solve for k.

3. The cost of admission to the Brookfield Zoo is $20 per student for the first 25 students, but only $15 for any additional students. If the total cost for the admission of a group of students is $380, not including tax, then the equation $20(25) + 15(x) = 380$ correctly describes this relationship if x represents the:

A. Average cost per student.

B. Price per student for the first 25 students.

C. Price per student for the additional number of students beyond the first 25.

D. Total number of student tickets purchased.

(E.) Additional number of student tickets purchased beyond the first 25.

4. Solve for x. $20(25) + 15(x) = 380$

5. The zoo is considering changing the initial cost (c) from $20, which would then change the total cost to T instead of $380, in order to maximize profit. Rewrite the equation above to represent this change.

$c(25) + 15x = T$

6. Solve this new equation for x.

$25c + 15x = T$

$-25c \quad\quad -25c$

Define Your Pride.

7. Solve for b in the following, $\frac{3a}{b} = 4$ $3a = 4b$

A. $b = \frac{4}{3a}$

B. $b = \frac{3a}{4}$

C. $b = 12a$

D. $b = 4 - 3a$

E. $b = 4 + 3a$

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8. $\frac{3}{4x^2} + \frac{9}{2x}$ is equivalent to: $\frac{3}{4x^2} + \frac{9}{2x}\left(\frac{2x}{2x}\right) \Rightarrow \frac{3}{4x^2} + \frac{18x}{4x^2}$

A. $\frac{27}{8x^2}$

B. $\frac{12}{4x^2}$

C. $\frac{21}{4x^2}$

D. $\frac{18x+3}{4x^2}$

E. $\frac{6x+9}{8x^3}$

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9. If $6y = 8x + 20$, then x =?

A. $y - 14$

B. $\frac{6y}{8} + 14$

C. $\frac{3y+10}{4}$

D. $\frac{3y-10}{4}$

E. $\frac{6y+20}{8}$

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10. If a = 2b + 9 and $c = \frac{b+5}{3}$, express a in terms of c:

$\rightarrow \quad 3c = b + 5 \Rightarrow 3c - 5 = b$